

What is claimed is:

1. (Currently amended) An apparatus for producing a sample of a mainly  
finely grained and dry material for defining the residual carbon content thereof as  
5 a function of a change in at least one electrical parameter, comprising:  
a measuring chamber;  
a screw conveyor connected to the measuring chamber and comprising a  
rotatable feed screw;  
means for rotating the feed screw at a predetermined torque for feeding  
10 the material to the measuring chamber for compaction therein; and  
means responsive to an abrupt increase in the torque for stopping rotation  
of the feed screw.
2. (Original) The apparatus of claim 1, wherein the measuring chamber and the  
15 screw conveyor are positioned in a chamber for collecting the material.
3. (Original) The apparatus of claim 1, wherein the screw conveyor comprises a  
tubular member for rotatably receiving the feed screw and provided with at least  
one opening for receiving the material.  
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4. (Canceled) The apparatus of claim 1, further comprising means for monitoring  
the torque of the rotating feed screw.
5. (Canceled) The apparatus of claim 4, wherein the torque monitoring means  
25 comprises means responsive to abrupt increases of the torque for terminating  
rotation of the of the feed screw.
6. (Original) A method of producing samples of a mainly finely granulated and  
dry material for determining the residual carbon content of the material,

comprising the steps of:

feeding the material at a predetermined force to a measuring chamber for compaction therein;

monitoring the force; and

5 interrupting the feeding of material at an abrupt increase in the force.

7. (Original) The method of claim 6, wherein the material is fed to the measuring chamber by a rotating conveyor screw and wherein the force is monitored as a function of the torque of the conveyor screw.

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8. (Original) The method of claim 7, wherein feeding of the material is interrupted at an increase in torque by more than 200 percent.

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